



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,425	06/01/2006	Susumu Yamaguchi	4600-0117PUS1	6373
2292 7590 09/07/2010 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER PADEN, CAROLYN A				
ART UNIT		PAPER NUMBER		
1781				
NOTIFICATION DATE		DELIVERY MODE		
09/07/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

# Office Action Summary

**Application No.**

10/563,425

**Applicant(s)**

YAMAGUCHI ET AL.

**Examiner**

Carolyn A. Paden

**Art Unit**

1781

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 July 2010.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15-21 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 15-21 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/CD)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 8, 2010 has been entered.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over van Dorp (3,686,003).

Van Dorp discloses flavoring foods with unsaturated aldehydes. Arachidonic acid (described as an n-6 long chain fatty acid having 20 carbon atoms that may be from vegetable oil on page 5, third and fourth paragraph) is cited as a precursor for the unsaturated aldehyde (example 6). The precursors may also be incorporated into foods (column 2, lines 30-34) and then oxidized to provide a flavor or the precursors are oxidized and added to foods. The flavor produced is described as savory (column 1, line 32). The amount of amount of flavoring used in foods is disclosed at column 3, lines 22-35. Linolenic acid is cited as a precursor for the flavoring agent in example 12. The claims appear to differ from van Dorp in the recitation of the amount of flavoring used in the food (see column 3, lines 22-35). It would have been obvious to one of ordinary skill in the art to include enough of the precursor arachidonic acid in a food composition in order to provide an appropriate amount of flavoring agent to food. Guidance as to the amount of arachidonic acid is provided in example 8, where more than 1% arachidonic acid is used to create flavoring for chicken soup.

Applicant argues that the taste prepared is KOKUMI and is not the same as a savory flavor. This argument has been considered but is not persuasive. Van Dorp uses the same method steps as the claims. The same acts in the same relation would be expected to provide the same result. The fact that the description of the resulting flavor may be different is not seen to alter the fact that the process is the same in both the claims and van Dorp.

Applicant argues that the present application is directed to producing kokumi in vegetable fat and oil. Van Dorp provides for using bland fat or oil as a diluent at column 3, lines 29-35. One would expect vegetable oil to be included in the oil of van Dorp.

Applicants arguments with regard to the discussion of a prior art reference have been considered but do not appear to be related to the claims in the application. Further there is no requirement in claims 15-18 for the compounds in the table on page 7 of applicants' arguments.

Claims 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over van Dorp as applied to claim 15-17 above, and further in view of Kiritsakis.

The claims appear to differ from van Dorp in the recitation of the inclusion of ketones and alcohol to the arachidonic acid. The final flavoring ingredient is an aliphatic aldehyde having from 11-17 carbon atoms and 2-4 double bonds (abstract). Trideca-2,4,7-trienal is cited as one of the products (column 1, line 43). The use of fat or oil as a diluent for the flavoring is disclosed at column 3, lines 29-35. Olive oil is known in the art as a flavorful edible oil that is useful in improving the flavor of foods. Kiritsakis teaches that the flavor components of olive oil contain a variety of ketones and alcohols, as shown on table 7. In particular hexanal, heptane-2-one and alcohol are mentioned. It would have been obvious to one of ordinary skill in the art to use olive oil as a diluent for the flavoring of van Dorp to include an olive oil flavor flavoring of van Dorp. It is appreciated that the specific alcohol of claim 21 is not mentioned but if one of ordinary skill in the art wanted to optimize the flavor of the food, it would have been obvious to modify the flavor with the alcohol of the claim.

Claims 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Simmons (EP0463660).

Simmons discloses preparing flavoring mixtures from mixtures of fatty acids in water. In example 1, palm oil with linolenic acid is shaken in the

presence of air at 85C for 8 hours. The results are shown on page 5. Linolenic acid is taken to be the n-6 fatty acid in this case (see applicants' specification at page 5, 2<sup>nd</sup> paragraph). The aldehydes formed have the desired carbon number and degree of unsaturation of the claims. The flavors produced are used in making soup with 10% fat, as shown in example 17.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn A Paden whose telephone number is (571) 272-1403. The examiner can normally be reached on Monday to Friday from 7 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached by dialing 571-272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is

available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Carolyn Paden/

Primary Examiner 1781